

Abstract

A method and a computer program for generating a model for the functional response of a control device (120), for generating a manipulated variable (u_d) for a controlled system (130) in response to a preselected setpoint value (y_d) is described. The model is also generated for nonlinear controlled systems (130) by performing the following steps: calculating the N^{th} derivative of the controlled variable as a function of the manipulated variable and of the controlled variable (y) itself and/or its derivatives of the n^{th} order with respect to time and generating the model for the control device (120) by solving the N^{th} derivative of the controlled variable (y) for the manipulated variable (u_d). Figure 1.

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